



012889-086.ST25

SEQUENCE LISTING

<110> Wastfelt, Maria K. Boden
Flock, Jan-Ingmar

<120> Fibrinogen Binding Protein

<130> 012889-086

<140> US 09/938,497
<141> 2001-08-27

<150> US 09/276,141
<151> 1999-03-25

<150> PCT/SE93/00759
<151> 1993-09-20

<150> SE 9302955-01
<151> 1993-09-13

<150> SE 9202720-0
<151> 1992-09-21

<160> 17

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<213> Staphylococcus aureus

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1 5 10 15
Lys Tyr Gly Thr
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<210> 2
<211> 20
<212> PRT
<213> Staphylococcus aureus

<400> 2
Ile Val Thr Lys Asp Tyr Ser Lys Glu Ser Arg Val Asn Glu Lys Ser
1 5 10 15
Lys Lys Gly Ala
20

<210> 3
<211> 20
<212> PRT
<213> Staphylococcus aureus

<400> 3

Ile Val Thr Lys Asp Tyr Ser Gly Lys Ser Gln Val Asn Ala Gly Ser
 1 5 10 15
 Lys Asn Gly Thr
 20

<210> 4
 <211> 20
 <212> PRT
 <213> Staphylococcus aureus

<400> 4
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 1 5 10 15
 Lys Asn Gly Thr
 20

<210> 5
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 <213> Staphylococcus aureus

<400> 5
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 1 5 10 15
 Asn Ile Val Glu
 20

<210> 6
 <211> 8
 <212> PRT
 <213> Staphylococcus aureus

<400> 6
 Met Tyr Pro Glu Lys Lys Pro Val
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<210> 7
 <211> 408
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> nucleotide sequence for fibrinogen-binding protein

<400> 7
 gagcgaagga tacggtccaa gagaaaagaa accagtgagt attaatcaca atatcgtaga 60
 gtacaatgat ggtacttta aatatcaatc tagaccaaaa tttaactcaa cacctaaata 120
 tattaaattc aaacatgact ataataatttt agaatttaac gatggtacat tcgaatatgg 180
 tgcacgtcca caatttaata aaccagcagc gaaaactgtat gcaactattt aaaaagaaca 240
 aaaatttgatt caagctcaaa atcttgcgag agaatttgaa aaaacacata ctgtcagtgc 300
 acacagaaaa gcacaaaagg cagtcaactt agtttcgttt gaatacaaaag tgaagaaaaat 360
 ggtcttacaa gagcgaattt gataatgtatt aaaacaagga ttagtgag 408

<210> 8
 <211> 136

<212> PRT
 <213> Artificial Sequence

<220>
 <223> fibrinogen-binding protein

<400> 8
 Asp Glu Gly Tyr Gly Pro Arg Glu Lys Lys Pro Val Ser Ile Asn His
 1 5 10 15
 Asn Ile Val Glu Tyr Asn Asp Gly Thr Phe Lys Tyr Gln Ser Arg Pro
 20 25 30
 Lys Phe Asn Ser Thr Pro Lys Tyr Ile Lys Phe Lys His Asp Tyr Asn
 35 40 45
 Ile Leu Glu Phe Asn Asp Gly Thr Phe Glu Tyr Gly Ala Arg Pro Gln
 50 55 60
 Phe Asn Lys Pro Ala Ala Lys Thr Asp Ala Thr Ile Lys Lys Glu Gln
 65 70 75 80
 Lys Leu Ile Gln Ala Gln Asn Leu Val Arg Glu Phe Glu Lys Thr His
 85 90 95
 Thr Val Ser Ala His Arg Lys Ala Gln Lys Ala Val Asn Leu Val Ser
 100 105 110
 Phe Glu Tyr Lys Val Lys Lys Met Val Leu Gln Glu Arg Ile Asp Asn
 115 120 125
 Val Leu Lys Gln Gly Leu Val Arg
 130 135

<210> 9
 <211> 1009
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> fib protein

<221> CDS
 <222> (157) ... (654)

<221> CDS
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 aagtgtttat agttaattaa taatttagtta atttcaaaag ttgtataaat aggataactt 120
 aataaatgtta agataataat ttggaggata attaac atg aaa aat aaa ttg ata 174
 Met Lys Asn Lys Leu Ile
 1 5
 gca aaa tct tta tta aca ata gcg gca att ggt att act aca act aca 222
 Ala Lys Ser Leu Leu Thr Ile Ala Ala Ile Gly Ile Thr Thr Thr
 10 15 20
 att gcg tca aca gca gat gcg agc gaa gga tac ggt cca aga gaa aag 270
 Ile Ala Ser Thr Ala Asp Ala Ser Glu Gly Tyr Gly Pro Arg Glu Lys
 25 30 35
 aaa cca gtg agt att aat cac aat atc gta gag tac aat gat ggt act 318
 Lys Pro Val Ser Ile Asn His Asn Ile Val Glu Tyr Asn Asp Gly Thr
 40 45 50

ttt aaa tat caa tct aga cca aaa ttt aac tca aca cct aaa tat att		366
Phe Lys Tyr Gln Ser Arg Pro Lys Phe Asn Ser Thr Pro Lys Tyr Ile		
55	60	65
		70
aaa ttc aaa cat gac tat aat att tta gaa ttt aac gat ggt aca ttc		414
Lys Phe Lys His Asp Tyr Asn Ile Leu Glu Phe Asn Asp Gly Thr Phe		
75	80	85
gaa tat ggt gca cgt cca caa ttt aat aaa cca gca gcg aaa act gat		462
Glu Tyr Gly Ala Arg Pro Gln Phe Asn Lys Pro Ala Ala Lys Thr Asp		
90	95	100
gca act att aaa aaa gaa caa aaa ttg att caa gct caa aat ctt gtg		510
Ala Thr Ile Lys Lys Glu Gln Lys Leu Ile Gln Ala Gln Asn Leu Val		
105	110	115
aga gaa ttt gaa aaa aca cat act gtc agt gca cac aga aaa gca caa		558
Arg Glu Phe Glu Lys Thr His Thr Val Ser Ala His Arg Lys Ala Gln		
120	125	130
aag gca gtc aac tta gtt tcg ttt gaa tac aaa gtg aag aaa atg gtc		606
Lys Ala Val Asn Leu Val Ser Phe Glu Tyr Lys Val Lys Lys Met Val		
135	140	145
150		
tta caa gag cga att gat aat gta tta aaa caa gga tta gtg aga taa		654
Leu Gln Glu Arg Ile Asp Asn Val Leu Lys Gln Gly Leu Val Arg *		
155	160	165
tacttctgtc attattttaa gttcaaaaata atttaatatt atattattt ttattaataa		714
aacgactatg ctatthaatg ccaggttaat gtaactttcc taaaattgac tatataatcg		774
ttaagtatca attttaagga gagtttaca atg aaa ttt aaa tat ata tta		827
Met Lys Phe Lys Lys Tyr Ile Leu		
170		
aca gga aca tta gca tta ctt tta tca tca act ggg ata gca act ata		875
Thr Gly Thr Leu Ala Leu Leu Ser Ser Thr Gly Ile Ala Thr Ile		
175	180	185
gaa ggg aat aaa gca gat gca agt agt ctg gac aaa tat tta act gaa		923
Glu Gly Asn Lys Ala Asp Ala Ser Ser Leu Asp Lys Tyr Leu Thr Glu		
190	195	200
205		
agt cag ttt cat gat aaa cgc ata gca gaa gaa tta aga act tta ctt		971
Ser Gln Phe His Asp Lys Arg Ile Ala Glu Glu Leu Arg Thr Leu Leu		
210	215	220
aac aaa tcg aat gta tat gca tta gct gca gga agc tt		1009
Asn Lys Ser Asn Val Tyr Ala Leu Ala Ala Gly Ser		
225	230	

<210> 10
 <211> 165
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> fib protein

<400> 10
 Met Lys Asn Lys Leu Ile Ala Lys Ser Leu Leu Thr Ile Ala Ala Ile
 1 5 10 15
 Gly Ile Thr Thr Thr Ile Ala Ser Thr Ala Asp Ala Ser Glu Gly
 20 25 30
 Tyr Gly Pro Arg Glu Lys Lys Pro Val Ser Ile Asn His Asn Ile Val
 35 40 45
 Glu Tyr Asn Asp Gly Thr Phe Lys Tyr Gln Ser Arg Pro Lys Phe Asn
 50 55 60
 Ser Thr Pro Lys Tyr Ile Lys Phe Lys His Asp Tyr Asn Ile Leu Glu
 65 70 75 80
 Phe Asn Asp Gly Thr Phe Glu Tyr Gly Ala Arg Pro Gln Phe Asn Lys
 85 90 95
 Pro Ala Ala Lys Thr Asp Ala Thr Ile Lys Lys Glu Gln Lys Leu Ile
 100 105 110
 Gln Ala Gln Asn Leu Val Arg Glu Phe Glu Lys Thr His Thr Val Ser
 115 120 125
 Ala His Arg Lys Ala Gln Lys Ala Val Asn Leu Val Ser Phe Glu Tyr
 130 135 140
 Lys Val Lys Lys Met Val Leu Gln Glu Arg Ile Asp Asn Val Leu Lys
 145 150 155 160
 Gln Gly Leu Val Arg
 165

<210> 11
 <211> 68
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> fib protein

<400> 11
 Met Lys Phe Lys Lys Tyr Ile Leu Thr Gly Thr Leu Ala Leu Leu
 1 5 10 15
 Ser Ser Thr Gly Ile Ala Thr Ile Glu Gly Asn Lys Ala Asp Ala Ser
 20 25 30
 Ser Leu Asp Lys Tyr Leu Thr Glu Ser Gln Phe His Asp Lys Arg Ile
 35 40 45
 Ala Glu Glu Leu Arg Thr Leu Leu Asn Lys Ser Asn Val Tyr Ala Leu
 50 55 60
 Ala Ala Gly Ser
 65

<210> 12
 <211> 781
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> fib gene from strain FDA 486

<400> 12
 atagataact atattttgtc tatattataa agtgtttata gtttaatttaat aatttagttaa 60
 tttcaaaaagt tgtataaataa ggataactta ataaatgtaa gataataatt tggaggataa 120
 ttaacatgaa aaataaaattg atagcaaaat ctttattaac aatagcggca attgttatta 180
 ctacaactac aattgcgtca acagcagatg cgagcgaagg atacggtcca agagaaaaga 240

aaccagttag tattaatcac aatatcgtag agtacaatga tggtaacttt aaatatcaat 300
 ctagacaaa atttaactca acacctaata atattaaatt caaacatgac tataatattt 360
 tagaatttaa cgatggtaca ttcgaatatg gtgcacgtcc acaatttaat aaaccagcag 420
 cggaaaactga tgcaactatt aaaaagaac aaaaattgtat tcaagctcaa aatcttgcg 480
 gagaatttga aaaaacacat actgtcagtg cacacagaaa agcacaaaag gcagtcact 540
 tagtttcgtt tgaatacataa gtgaagaaaa tggtcttaca agagcgaatt gataatgtat 600
 taaaacaagg attagtgaga taatacttct gtcattattt taagttcaaa ataatttaat 660
 attatattat tttttattaa taaaacgact atgcattta atgccaggtt aatgtactt 720
 tcctaaaatt gactatataa tcgttaagta tcaattttaa ggagagttt caatgaaatt 780
 t 781

<210> 13
 <211> 785
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> fib gene from strain Newman

<400> 13
 atagatagct atattcagtc tatattataa agtgttataa gtttaatttaat aatttagttaa 60
 tttcaaaagt tggataactta ataaatgtaa gataataatt tggaggataa 120
 ttgacatgaa aaatgcattt atagcaaaaat ctttatttaac attagcggca ataggattta 180
 ctacaactac aattgcgtca acagcagatg cgagcgaagg atacggtcca agagaaaaa 240
 aaccagttag tattaatcac aatatcgtag agtacaatga tggtaacttt aaatatcaat 300
 ctagacaaa atttaactca acacctaata atattaaatt caaacatgac tataatattt 360
 tagaatttaa cgatggtaca ttcgaatatg gtgcacgtcc acaatttaat aaaccagcag 420
 cggaaaactga tgcaactatt aaaaagaac aaaaattgtat tcaagctcaa aatcttgcg 480
 gagaatttga aaaaacacat actgtcagtg cacacagaaa agcacaaaag gcagtcact 540
 tagtttcgtt tgaatacataa gtgaagaaaa tggtcttaca agagcgaatt gataatgtat 600
 taaaacaagg attagttaaa taaaacttca atcgttgcgt 55 ttatctggaa ataatttaatt 660
 aaatgttatg ttaattttg ttaatgaaaa aagtaatcta ttaatgaca ggttaatgtat 720
 attgtcctga aattgactat atactcagta agtataattt ttaaggagag cttataatga 780
 aattt 785

<210> 14
 <211> 165
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> fib gene from strain 486

<400> 14
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 Gly Ile Thr Thr Thr Ile Ala Ser Thr Ala Asp Ala Ser Glu Gly
 20 25 30
 Tyr Gly Pro Arg Glu Lys Lys Pro Val Ser Ile Asn His Asn Ile Val
 35 40 45
 Glu Tyr Asn Asp Gly Thr Phe Lys Tyr Gln Ser Arg Pro Lys Phe Asn
 50 55 60
 Ser Thr Pro Lys Tyr Ile Lys Phe Lys His Asp Tyr Asn Ile Leu Glu
 65 70 75 80
 Phe Asn Asp Gly Thr Phe Glu Tyr Gly Ala Arg Pro Gln Phe Asn Lys
 85 90 95
 Pro Ala Ala Lys Thr Asp Ala Thr Ile Lys Lys Glu Gln Lys Leu Ile
 100 105 110
 Gln Ala Gln Asn Leu Val Arg Glu Phe Glu Lys Thr His Thr Val Ser

115	120	125
Ala His Arg Lys Ala Gln Lys	Ala Val Asn Leu Val	Ser Phe Glu Tyr
130	135	140
Lys Val Lys Lys Met Val	Leu Gln Glu Arg	Ile Asp Asn Val Leu Lys
145	150	155
Gln Gly Leu Val Arg		
	165	

<210> 15
 <211> 165
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> fib gene from strain Newman

15			
Met Lys Asn Ala Leu Ile Ala Lys Ser	Leu Leu Thr Leu Ala Ala Ile		
1	5	10	15
Gly Ile Thr Thr Thr Ile Ala Ser	Thr Ala Asp Ala Ser Glu Gly		
20	25	30	
Tyr Gly Pro Arg Glu Lys Lys Pro Val Ser	Ile Asn His Asn Ile Val		
35	40	45	
Glu Tyr Asn Asp Gly Thr Phe Lys Tyr	Gln Ser Arg Pro Lys Phe Asn		
50	55	60	
Ser Thr Pro Lys Tyr Ile Lys Phe Lys	His Asp Tyr Asn Ile Leu Glu		
65	70	75	80
Phe Asn Asp Gly Thr Phe Glu Tyr Gly	Ala Arg Pro Gln Phe Asn Lys		
85	90	95	
Pro Ala Ala Lys Thr Asp Ala Thr	Ile Lys Lys Glu Gln Lys Leu Ile		
100	105	110	
Gln Ala Gln Asn Leu Val Arg Glu	Phe Glu Lys Thr His Thr Val Ser		
115	120	125	
Ala His Arg Lys Ala Gln Lys Ala Val Asn Leu Val	Ser Phe Glu Tyr		
130	135	140	
Lys Val Lys Lys Met Val	Leu Gln Glu Arg Ile Asp Asn Val Leu Lys		
145	150	155	160
Gln Gly Leu Val Lys			
	165		

<210> 16
 <211> 136
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> fib gene from strain Newman

16			
Ser Glu Gly Tyr Gly Pro Arg Glu Lys Lys Pro Val Ser	Ile Asn His		
1	5	10	15
Asn Ile Val Glu Tyr Asn Asp Gly Ser	Phe Lys Tyr Gln Ser Arg Pro		
20	25	30	
Lys Phe Asn Ser Thr Pro Lys Tyr Ile Lys Phe Lys His	Asp Tyr Asn		
35	40	45	
Ile Leu Glu Phe Asn Asp Gly Thr Phe Glu Tyr Gly	Ala Arg Pro Gln		
50	55	60	

Phe Asn Lys Pro Ala Ala Lys Thr Asp Ala Thr Ile Lys Lys Glu Gln
 65 70 75 80
 Lys Leu Ile Gln Ala Gln Asn Leu Val Arg Glu Phe Glu Lys Thr His
 85 90 95
 Thr Val Ser Ala His Arg Lys Ala Gln Lys Ala Val Asn Leu Val Ser
 100 105 110
 Phe Glu Tyr Lys Val Lys Lys Met Val Leu Gln Glu Arg Ile Asp Asn
 115 120 125
 Val Leu Lys Gln Gly Leu Val Arg
 130 135

<210> 17
 <211> 177
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> coagulase from strain *Staphylococcus aureus*

<400> 17
 Ala Ser Gln Tyr Gly Pro Arg Pro Gln Phe Asn Lys Thr Pro Lys Tyr
 1 5 10 15
 Val Lys Tyr Arg Asp Ala Gly Thr Gly Ile Arg Glu Tyr Asn Asp Gly
 20 25 30
 Thr Phe Gly Tyr Glu Ala Arg Pro Arg Phe Asn Lys Pro Ser Glu Thr
 35 40 45
 Asn Ala Tyr Asn Val Thr Thr His Ala Asn Gly Gln Val Ser Tyr Gly
 50 55 60
 Ala Arg Pro Thr Tyr Lys Lys Pro Ser Glu Thr Asn Ala Tyr Asn Val
 65 70 75 80
 Thr Thr His Ala Asn Gly Gln Val Ser Tyr Gly Ala Arg Pro Thr Gln
 85 90 95
 Asn Lys Pro Ser Lys Thr Asn Ala Tyr Asn Val Thr Thr His Gly Asn
 100 105 110
 Gly Gln Val Ser Tyr Gly Ala Arg Gln Ala Gln Asn Lys Pro Ser Lys
 115 120 125
 Thr Asn Ala Tyr Asn Val Thr Thr His Ala Asn Gly Gln Val Ser Tyr
 130 135 140
 Gly Ala Arg Pro Thr Tyr Lys Lys Pro Ser Lys Thr Asn Ala Tyr Asn
 145 150 155 160
 Val Thr Thr His Ala Asp Gly Thr Ala Thr Tyr Gly Pro Arg Val Thr
 165 170 175
 Lys